CONTENTS OF VOLUME 462

March 1993

GLYNN I. M. 'All hands to the sodium pump.' 1

FRANKEL Roddy A., METTING Patricia J. & BRITTON Steven Loyal Evaluation of spontaneous baroreflex sensitivity in conscious dogs. 31

BELAN Pavel, KOSTYUK Platon, SNITSAREV Vladislav & TEPIKIN Alexej *Calcium* clamp in isolated neurones of the snail *Helix pomatia*. 47

MURPHY P.R. & HAMMOND G.R. The locomotor discharge characteristics of ankle flexor γ-motoneurones in the decerebrate cat. 59

DIPOLO Reinaldo & BEAUGÉ Luis Effects of some metal–ATP complexes on Na^+–Ca^{2+} exchange in internally dialysed squid axons. 71

MARPLE-HORVAT D.E., AMOS A.J., ARMSTRONG D.M. & CRIADO J.M. Changes in the discharge patterns of cat motor cortex neurones during unexpected perturbations of on-going locomotion. 87

BANGSBO J., JOHANSEN L., GRAHAM T. & SALTIN B. Lactate and H^+ effluxes from human skeletal muscles during intense, dynamic exercise. 115

PHILLIPS S.K., WISEMAN R.W., WOLEDGE R.C. & KUSHMERICK M.J. The effects of metabolic fuel on force production and resting inorganic phosphate levels in mouse skeletal muscle. 135

SEALS Douglas R. Influence of force on muscle and skin sympathetic nerve activity during sustained isometric contractions in humans. 147

CAVAGNA G.A. Effect of temperature and velocity of stretching on stress relaxation of contracting frog muscle fibres. 161

LOWE Graeme & GOLD Geoffrey H. Contribution of the ciliary cyclic nucleotide-gated conductance to olfactory transduction in the salamander. 175

RICHARD Sylvain, CHARNET Pierre & NERBONNE Jeanne M. *Interconversion* between distinct gating pathways of the high threshold calcium channel in rat ventricular myocytes. 197

CATARSI S., SCURI R. & BRUNELLI M. Cyclic AMP mediates inhibition of the Na^+–K^+ electrogenic pump by serotonin in tactile sensory neurones of the leech. 229

MULKEY R.M. & ZUCKER R.S. Calcium released by photolysis of DM-nitrophen triggers transmitter release at the crayfish neuromuscular junction. 243

PERSSON P.B., EHMKE H., KIRCHHEIM H.R., JANSSEN B., BAUMANN J.Ê., JUST A. & NAFZ B. Autoregulation and non-homeostatic behaviour of renal blood flow in conscious dogs. 261

SHIMIZU Toshikatsu, NAKAMURA Masuhisa, YOSHITOMI Koji & IMAI Masashi Effects of prostaglandin E_2 on membrane voltage of the connecting tubule and cortical collecting duct from rabbits. 275

CHAPLEAU Mark W., LU Jianping, HAJDUCZOK George & ABBOUD Francois M. Mechanism of baroreceptor adaptation in dogs: attenuation of adaptation by the K^+ channel blocker 4-aminopyridine. 291

HUANG Rong-Chi & GILLETTE Rhanor Co-regulation of cAMP-activated Na^+ current by Ca^{2+} in neurones of the mollusc *Pleurobranchaea*. 307

JOHNSON Barry D. & BYERLY Lou Photo-released intracellular Ca^{2+} rapidly blocks Ba^{2+} current in *Lymnaea* neurons. 321

DALE Nicholas A large, sustained Na^+- and voltage-dependent K^+ current in spinal neurons of the frog embryo. 349

MCBAIN Chris J. & DINGLEDINE Raymond Heterogeneity of synaptic glutamate receptors on CA3 stratum radiatum interneurones of rat hippocampus. 373

SOLOMON Joel S. & NERBONNE Jeanne M. Hyperpolarization-activated currents in isolated superior colliculus-projecting neurons from rat visual cortex. 393

BROCKHAUS J., BALLANYI K., SMITH J.C. & RICHTER D.W. Microenvironment of respiratory neurons in the *in vitro* brainstem–spinal cord of neonatal rats. 421

ELS Willem J. & CHOU Kuang-Yi Sodium-dependent regulation of epithelial sodium channel densities in frog skin; a role for the cytoskeleton. 447

ROBINSON D.W., RATTO G.M., LAGNADO L. & MCNAUGHTON P.A. Temperature dependence of the light response in rat rods. 465

SHEN K.-Z. & SURPRENANT Annmarie Common ionic mechanisms of excitation by substance P and other transmitters in guinea-pig submucosal neurones. 483

MATTHEWS Peter B.C. Interaction between short- and long-latency components of the human stretch reflex during sinusoidal stretching. 503

WANG Y. & MATHERS D.A. Ca^{2+}-dependent K^+ channels of high conductance in smooth muscle cells isolated from rat cerebral arteries. 529

XI Lei, SMITH Curtis A., SAUPE Kurt W. & DEMPSEY Jerome A. Effects of memory from vagal feedback on short-term potentiation of ventilation in conscious dogs. 547

EINHORN Leslie C. & OXFORD Gerry S. Guanine nucleotide binding proteins mediate D_2 dopamine receptor activation of a potassium channel in rat lactrotrophs. 563

WEST Jan M. & STEPHENSON D. George Ca^{2+} and Sr^{2+} activation properties of skinned muscle fibres with different regulatory systems from crustacea and rat. 579

FIEVET Bruno, GUIZOUARN Hélène, PELLISSIER Bernard, GARCIA-ROMEU Federico & MOTAIS René Evidence for a K^+–H^+ exchange in trout red blood cells. 597

GUIZOUARN Hélène, HARVEY Brian J., BORGESE Franck, GABILLAT Nicole, GARCIA-ROMEU Federico & MOTAIS René Volume-activated Cl^--independent and Cl^--dependent K^+ pathways in trout red blood cells 609

FREY Gudrun & SCHLUE Wolf-R. pH recovery from intracellular alkalinization in Retzius neurones of the leech central nervous system. 627

HERMAN Martin D., REUVENY Eitan & NARAHASHI Toshio The effect of polyamines on voltage-activated calcium channels in mouse neuroblastoma cells. 645

UMEMIYA M., ARAKI I. & KUNO M. Electrophysiological properties of axotomized facial motoneurones that are destined to die in neonatal rats. 661

USHIO-FUKAI Masuko, ABE Shimako, KOBAYASHI Sei, NISHIMURA Junji & KANAIDE Hideo Effects of isoprenaline on cytosolic calcium concentrations and on tension in the porcine coronary artery. 679

WILKINSON Daniel J., KUSHMAN Nancy L. & DAWSON David C. Tetraethylammonium-sensitive apical K^+ channels mediating K^+ secretion by turtle colon. 697

RICHARDS Neil W. & DAWSON David C. Selective block of specific K^+-conducting channels by diphenylamine-2-carboxylate in turtle colon epithelial cells. 715

MARCHENKO Sergey M. & SAGE Stewart O. Electrical properties of resting and acetylcholine-stimulated endothelium in intact rat aorta. 735

JIANG Z.-G., PESSIA M. & NORTH R. A. Dopamine and baclofen inhibit the hyperpolarization-activated cation current in rat ventral tegmental neurones. 753